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10/766,928	01/30/2004	Toshiyuki Fukuoka	1359.1087	3959

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER	
TERMANINI, SAMIR	

ART UNIT	PAPER NUMBER
2178	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/766,928	FUKUOKA ET AL.	
	Examiner	Art Unit	
	Samir Termanini	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

BACKGROUND

1. This Final Office Action is responsive to the following communications: Amendment filed on 10/16/2008.

2. Claims 1-16 are pending. Claims 1 and 15-16 are independent in form. Applicant has Amended Claims 1 and 15-16. Applicant has canceled Claim 17.

INFORMATION DISCLOSURE STATEMENT

3.. The information disclosure statement (IDS) filed on 5/7/2008 was acknowledged and considered by the examiner. The initial copy of form PTO-1449 was included in a previous office action.

RESPONSE TO AMENDMENT

4. The Rejections previously made under 35 U.S.C. §102(b) of claims 1-16, for being anticipated by *Barbara Hayes-Roth* are being maintained.

CLAIM REJECTIONS - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1–16** are rejected under 35 U.S.C. 102(b) as being anticipated by *Barbara Hayes-Roth et al.* (US 2002/0005865 A1).

I. Citation of Prior Art

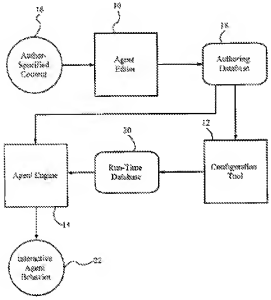
A reference to specific paragraphs, columns, pages, or figures in a cited prior art reference is not limited to preferred embodiments or any specific examples[1]. It is well settled that a prior art reference, in its entirety, must be considered for all that it expressly teaches and fairly suggests to one having ordinary skill in the art[2]. Stated differently, a prior art disclosure reading on a limitation of Applicant's claim cannot be ignored on the ground that other embodiments disclosed were instead cited. Therefore, the Examiner's citation to a specific portion of a single prior art reference is not intended to exclusively dictate, but rather, to demonstrate an exemplary disclosure commensurate with the specific limitations being addressed.

II. General Discussion of the Applied Prior Art.

Barbara Hayes-Roth discloses methods for authoring the content of a computer-controlled agent by identifying a potential agent context to an author; receiving content in context for the agent; and storing the content such that it can be accessed by a run-time agent. *Barbara Hayes-Roth* teaches the agent to be a run-time agent which uses content to control its behavior in an actual matching context. *Barbara Hayes-Roth* use a graphical user interface for allowing an author to enter content without having any technical understanding of the run-time engine or the system's computer code. *Barbara Hayes-Roth* show an agent in the context of interacting with a user through dialogues and

[1] *In re Heck*, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968).

gestures that are context sensitive. *Barbara Hayes-Roth* does teach that their agent responds to user questions differently when in different moods, "and the agent's moods change in response to user statements or actions the agent performs." (see *Barbara Hayes-Roth,* Abstract)(emphasis added). For clearness, Fig. 1 is reproduced below:



III. Prior Art Anticipation of Claimed Limitations.

As to independent **claim 1**, *Barbara Hayes-Roth* describe(s): A dialog control system, comprising: an input that interprets input information input by a user ("...receiving from the author content ...," para. [0012]); a plurality of dialog agents, each changing a state in accordance with the input information ("A given actual context of an agent matches a given potential context of the agent if a value of a state variable in the given actual context matches a value of a corresponding

[2] *Upsher-Smith Labs. v. Pamlab, LLC,* 412 F.3d 1319, 1323, 75 USPQ2d 1213, 1215 (Fed. Cir. 2005); *In re Fritch*, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1782 (Fed. Cir. 1992); *Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989); *In re Fracalossi,* 681 F.2d 792, 794 n.1, 215 USPQ 569, 570 n.1

state variable in the given potential context.," para. [0043]), and generating a response ("...dialogue delivered by the agent...," para. [0012]); and a dialog agent control part that communicates with the dialog agents and the input part which intermediates between the dialog agents and the input part ("...actual context that occurs during operation of the agent and that matches the potential context...," para. [0012]), registers processing capability information about each of the plurality of the dialog agents by requesting the processing capability information from one or more of the dialog agents ("Each line of dialog has one gesture associated with it," para. [0114]) for identifying a plurality of the dialog agents ("...agents...," para. [0003]), manages the transmission of the input information and respective responses ("...what the Imp Character will say in response...," para. [0064]), and transmits a response of processing results from the dialog agents to an output part ("...Character will respond with the related piece of dialog...," para. [0078]), wherein, when the input information is input ("...USER INPUT...," para. [0045]), the dialog control part is selects a dialog agent based in the registered processing capability information of each of the dialog agent in each state, ("in which case the ImpEngine will pick amongst them for one to display.," para. [0114]; "...track and store various items of information...," para. [0144]; "...Examples of Matches between Actual Contexts and Potential Contexts of the Agent Izzy ...," para. [0061]), and transmits the input information to the selected dialog agent to receive a response thereto ("...an internal event or state of the agent, or an input from a different computer-controlled process...," para. [0013]).

As to dependent **claim 2**, which depends from claim 1, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 1, wherein the dialog control part

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(CCPA 1982); *In re Lamberti,* 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976); *In re Bozek,* 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

previously stores identification information of the dialog agents and selection priority of the dialog agents so that the identification information is associated with the selection priority ("...what is stored in a database from a previous interaction...," para. [0128]), refers to the dialog agents in a decreasing order of the selection priority when referring to the input information and the processable information registered processing capability ("...Log cues are preconditions that are used to help catalog behaviors and topics of interest as they occur in real interactions...," para. [0129]), and transmits the input information to the first selected dialog agent to request a response to the input information ("...receiving from the author content for the agent in the potential context...," para. [0012]).

As to dependent **claim 3**, which depends from claim 2, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 2, wherein the dialog control part accumulates identification information of the dialog agent selected as a transmission destination of the input information based upon the registered processing capability ("...be identified by the user or for the user...," para. [0013]), refers to the first stored dialog agent when selecting the subsequent dialog agent ("...storing...," para. [0012]), in a case where the stored dialog agent is capable of processing the input information ("...processing unit...," para. [0390]), transmits the input information to the stored dialog agent to request a response to the input information based upon the registered processing capability, and in a case where the stored dialog agent is not capable of processing the input information ("...uses the content to control the behavior of the agent in an actual context that occurs during operation of the agent and that matches the potential context...," para. [0012]), refers to the dialog agents in a decreasing order of the selection priority ("...decrease) in the agent's mood or user's assumed mood by a specified qualitative magnitude...," para. [0386]).

As to dependent **claim 4**, which depends from claim 2, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 2, wherein the selection priority of the dialog agent is automatically updated in accordance with a use frequency of the dialog agent ("...wording [f]requency ...," para. [0178]).

As to dependent **claim 5**, which depends from claim 3, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 3, wherein the selection priority of the dialog agent is automatically updated in accordance with a use frequency ("...one that remembers one-word answers and another that remembers two-word answers of the dialog agent (the two-word pattern should be more important than the one word pattern)....," para. [0377]).

As to dependent **claim 6**, which depends from claim 2, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 2, wherein, in the dialog control part ("...computer-controlled agent...," para. [0012]), the control agents to be referred to are narrowed in accordance with contents of the input information ("...narrow it down further...," para. [0273]), and the narrowed dialog agents are referred to in a decreasing order of the selection priority ("...generic help response ...," para. [0273]).

As to dependent **claim 7**, which depends from claim 3, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 3, wherein, in the dialog control part ("...Natural Language Generation ...," para. [0078]), the control agents to be referred to are narrowed in accordance with contents of the input information ("...narrow it down further...," para. [0273]), and the narrowed dialog agents are referred to in a decreasing order of the selection priority ("...decrease) in the agent's mood or user's assumed mood by a specified qualitative magnitude...," para. [0386]).

As to dependent **claim 8**, which depends from claim 4, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 4, wherein, in the dialog control part ("...Natural Language Generation ...," para. [0078]), the control agents to be referred to are narrowed in accordance with contents of the input information ("...narrow it down further...," para. [0273]), and the narrowed dialog agents are referred to in a decreasing order of the selection priority ("...weighted at 178,507 while the Ecstatic line would be weighted at 849,347, so the Ecstatic line would be about 5 times more likely to be selected...," para. [0113]).

As to dependent **claim 9**, which depends from claim 1, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 1, wherein the dialog control part stores the identification information of the dialog agent determined to be available based upon the registered processing capability of the dialog agents ("...identifies a potential context of an agent to an author, receives input from the author, and stores the content in a database...," para. [0064]; "...If two lines of dialog for Happy and Ecstatic were available, the Happy line in this case would be weighted at 178,507 ...," para. [0113]).

As to dependent **claim 10**, which depends from claim 2, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 2, wherein the dialog control part includes a user information input part for inputting information for identifying a user ("...identifying to an author a potential context of the agent...," para. [0012]), stores input information for identifying the user and information on a state using the dialog agent including the selection priority on a user basis ("...storing the content such that it can be accessed by a run-time system that uses the content to control the behavior of the agent in an actual context that occurs during operation of the agent and that matches the potential context...," para. [0012]), and performs processing in accordance with the selection priority on a user basis ("...178,507 while the Ecstatic line would be weighted at 849,347,

so the Ecstatic line would be about 5 times more likely to be selected. These numbers change depending on what was selected on the Specificity Scaler. If Most Specific Only is selected, the ImpEngine will only select the line with the greatest specificity...," para. [0113]).

As to dependent **claim 11**, which depends from claim 3, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 3, wherein the dialog control part includes a user information input part for inputting information for identifying a user ("...identifying to an author a potential context of the agent...," para. [0012]), stores input information for identifying the user and information on a state using the dialog agent including the selection priority on a user basis ("...178,507 while the Ecstatic line would be weighted at 849,347, so the Ecstatic line would be about 5 times more likely to be selected...," para. [0113]), and performs processing in accordance with the selection priority on a user basis ("...These numbers change depending on what was selected on the Specificity Scaler. If Most Specific Only is selected, the ImpEngine will only select the line with the greatest specificity...," para. [0113]).

As to dependent **claim 12**, which depends from claim 4, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 4, wherein the dialog control part includes a user information input part for inputting information for identifying a user ("...identifying to an author a potential context of the agent...," para. [0012]), stores input information for identifying the user and information on a state using the dialog agent including the selection priority on a user basis ("...178,507 while the Ecstatic line would be weighted at 849,347, so the Ecstatic line would be about 5 times more likely to be selected...," para. [0113]), and performs processing in accordance with the selection priority on a user basis ("...These numbers change depending on what was selected on the Specificity Scaler. If Most Specific Only is selected, the ImpEngine will only select the line with the greatest specificity...," para. [0113]).

As to dependent **claim 13**, which depends from claim 5, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 5, wherein the dialog control part includes a user information input part for inputting information for identifying a user ("...identifying to an author a potential context of the agent...," para. [0012]), stores input information for identifying the user and information on a state using the dialog agent including the selection priority on a user basis ("...178,507 while the Ecstatic line would be weighted at 849,347, so the Ecstatic line would be about 5 times more likely to be selected...," para. [0113]), and performs processing in accordance with the selection priority on a user basis ("...These numbers change depending on what was selected on the Specificity Scaler. If Most Specific Only is selected, the ImpEngine will only select the line with the greatest specificity...," para. [0113]).

As to dependent **claim 14**, which depends from claim 6, *Barbara Hayes-Roth* further disclose(s): The dialog control system according to claim 6, wherein the dialog control part includes a user information input part for inputting information for identifying a user ("...identifying to an author a potential context of the agent...," para. [0012]), stores input information for identifying the user and information on a state using the dialog agent including the selection priority on a user basis ("... stores the content in a database...," para. [0064]), and performs processing in accordance with the selection priority on a user basis ("...weighted at 178,507 while the Ecstatic line would be weighted at 849,347, so the Ecstatic line would be about 5 times more likely to be selected...," para. [0113]).

As to independent **claim 15,** this claim differs from claim 1 only in that it is directed to a process defined by the product of claim 1. Accordingly, this claim is rejected for the same reasons set forth in the treatment of claim 1, above.

As to independent **claim 16,** this claim differs from claim 15 only in that it is directed to a product defined by the process of claim 15. Accordingly, this claim is rejected for the same reasons set forth in the treatment of claim 15, above.

RESPONSE TO ARGUMENTS

7. Applicant arguments (10/16/2008), with respect to the 35 U.S.C. §102 Rejections cited by the Examiner in the previous Office Action (Mail dated: 5/16/2008), have been fully considered but are not persuasive. Therefore, the rejection(s) have been maintained.

Applicant argues that independent claim 1 recites a dialog agent that changes a state in accordance with the input information, and changes acceptable input information which the dialog agent is capable of accepting in accordance with the change in the state. In reply, the examiner respectfully makes the following points:

Barbara Hayes-Roth teaches:

> [0040] A context of an agent is a combination of a plurality of alternative values for each of a plurality of state variables of the agent, where the values of the state variables co-occur, either simultaneously or in sequence, during an operation of the agent.
>
> [0043] A given actual context of an agent matches a given potential context of the agent if a value of a state variable in the given actual context matches a value of a corresponding state variable in the given potential context.
>
> [0064] Typically, the invention is implemented with many more potential contexts based on more than two state variables.

Applicant argues:

> A prima facie case of anticipation based upon Hayes-Roth cannot been established, because there is no evidence that Hayes-Roth, which discusses a matching between an actual context and a potential context in one agent, expressly or inherently (necessarily requires) the claimed "a dialog agent control part that communicates with the dialog agents and the input part, and which intermediates between the dialog and the input part, registers processing capability information about each of the plurality of the dialog agents by requesting the processing capability information from one or more of the dialog agents, manages transmission of the input information, including the responses of the dialog agents, to the dialog agent to request information respective responses, and transmits a response of processing results from the dialog agents to an output part.

In reply, the examiner respectfully points to the Applicant's specification:

> dialog agent[s are] determined to be available based on the processable information on a basis of the dialog agents, and the dialog control part inquires about the processable information with respect to only the dialog agent determined to be available[3]

Additionally, Applicant describes the *plurality of dialog agents:*

> When the input information is input, the dialog control part is notified of acceptable input information indicating input information which each of the dialog agents is capable of accepting in each state from the plurality of the dialog agents, , matches the input information with the acceptable input information, selects the dialog agent capable of processing the input information, and transmits the input information to the selected dialog agent to receive a response thereto.

Applicant also explains that, "the dialog control part 303 notifies an output part 302 of the response processing results in the selected dialog agent 304."[4]

The Agent in *Barbara Hayes-Roth* is the applicant's *dialog control part* and that the plurality of dialog agents are the "actual context of an *agent matches* a given potential context of the agent if a value of a state variable in the given actual context matches a value of a corresponding state variable in the given potential context." (*Barbara Hayes-Roth* para. [0043]). Therefore, *Barbara Hayes-Roth* taught the "plurality of dialog agents," that is, each piece of related dialog that a character will

[3] Para 0014 of Applicants published Application. (emphasis added).
published Application.

respond with is a dialog agent. ("When a user's input matches a piece of NLU, the Imp Character will respond with the related piece of dialog. This is Natural Language Generation (NLG). A piece of dialog is an example of authored content," para. [0078])(emphasis added).

CONCLUSION

8. All prior art made of record in this Office Action or as cited on form PTO-892 notwithstanding being relied upon, is considered pertinent to applicant's disclosure. Therefore, Applicant is required under 37 CFR §1.111(c) to consider these references fully when responding to this Office Action.

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samir Termanini at telephone number is (571) 270-1047. The Examiner can normally be reached from 9 A.M. to 6 P.M., Monday through Friday.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Samir Termanini/
Examiner, Art Unit 2178

/Stephen S. Hong/
Supervisory Patent Examiner, Art Unit 2178